UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/091,574	03/07/2002	Ronen Ben-Ari	2736/2	7965

7590 06/24/2003

DR. MARK FRIEDMAN LTD.
C/O BILL POLKINGHORN
DISCOVERY DISPATCH
9003 FLORIN WAY
UPPER MARLBORO, MD 20772

EXAMINER
NGUYEN, MICHELLE P

ART UNIT	PAPER NUMBER
2851	

DATE MAILED: 06/24/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/091,574	Applicant(s) BEN-ARI, RONEN	
	Examiner Michelle Nguyen	Art Unit 2851	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____ .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) 1-27 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) 1-8,17-21 and 23-27 is/are rejected.

7)☒ Claim(s) 9-16 and 22 is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on 24 April 2002 is/are: a)☐ accepted or b)☒ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

Information Disclosure Statement

1. The listing of references in the specification is not a proper information disclosure statement. 37 CFR 1.98(b) requires a list of all patents, publications, or other information submitted for consideration by the Office, and MPEP § 609 A(1) states, "the list may not be incorporated into the specification but must be submitted in a separate paper." Therefore, unless the references have been cited by the examiner on form PTO-892, they have not been considered.

Drawings

2. The drawings are objected to because the print quality of Figs. 1, 9, 12 and 14 are poor. Structural elements and lead lines are difficult to read.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Claim Objections

3. Claim 25 is objected to because in line 2, "the step of sensing" should be --a step of sensing--.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1-8, 17, 19 and 20 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 4,587,633 to Fussell.

With regard to claim 1, Fussell discloses an inflatable display comprising:

an inflatable balloon (ovaloid 50) (see Col. 4, lines 29-31, Fig. 2);

a projector (leftmost projector 58) having a projection lens (not numbered) (see Fig. 2);

an internal support structure (central support mast and structure, plate 57) that supports:

said inflatable balloon (see Col. 4, lines 37-9, Figs. 1, 2); and

said projector so that said projection lens is eccentrically disposed within said inflatable balloon (see Fig. 2); and

an external support structure (base unit 56) that supports said internal support structure (see Fig. 2).

With regard to claim 2, Fussell teaches said inflatable balloon of claim 1 to have a first side (leftmost arcuate panel 52) and a second side (rightmost arcuate panel 52) and said projection lens to be deployed within said first side to project onto said second side (see Fig. 2).

With regard to claim 3, Fussell teaches said inflatable balloon of claim 1 to have a central axis (not shown) and said projection lens to be deployed within said inflatable balloon eccentric to said central axis (see Fig. 2; Here examiner considers the central axis to extend through the center of the plate 57, wherein the projectors 58 are disposed symmetrically about the central axis.).

With regard to claim 4, Fussell teaches said internal support structure of claim 1 to rotate in relation to said external support structure (see Col. 3, lines 30-4, Col. 4, lines 40-4).

With regard to claim 5, Fussell teaches said external support structure of claim 1 to be mechanically connected to said internal support structure substantially on said central axis (see Col. 4, lines 41-4; Here it is understood that the plate 57 can rotate with respect to the base unit 56. Therefore, it is further understood that the plate 57 and the base unit 56 are mechanically connected to each other.).

With regard to claim 6, Fussell discloses an inflatable display comprising:

an inflatable balloon (spheroid 10) (see Col. 2, lines 46-9, Fig. 1);

a projector (leftmost projector head 42) having a projection lens (projector head lens 48) (see Fig. 1);

an internal support structure (central support mast and structure) that supports:

said inflatable balloon (see Fig. 1); and

said projector so that said projection lens is eccentrically disposed within said inflatable balloon (see Fig. 1); and

an external support structure (base unit 20) that supports said internal support structure (see Fig. 1), wherein

said internal support structure includes:

a curved support member (mounting ring 39) that is mechanically connected to said inflatable balloon (see Col. 3, lines 53-8); and

a support arm (column 24) that is mechanically connected to both said curved support member (via column 22, base 26 and base unit 20) and said projector (see Fig. 1).

With regard to claim 7, Fussell teaches said curved support member of claim 6 to assume the configuration of a closed loop (see Col. 53-4).

With regard to claim 8, Fussell teaches said curved support member of claim 6 to assume the configuration of a ring (see Col. 53-4).

With regard to claim 17, Fussell teaches the inflatable display of claim 7, wherein:

said inflatable balloon has a first section (section of the balloon in contact with the left portion of the mounting ring) and a second section (section of the balloon in contact with the right portion of the mounting ring) (see Fig. 1) ; and

an attachment configuration (fastening means 41) for attaching and detaching repeatably at least one of said first section and said second section to said closed loop (see Fig. 1).

With regard to claim 19, Fussell discloses an inflatable display comprising:

an inflatable balloon (spheroid 10) (see Col. 2, lines 46-9, Fig. 1);

a projector (leftmost projector head 42) having a projection lens (projector head lens 48) (see Fig. 1);

an internal support structure (central support mast and structure) that supports:

said inflatable balloon (see Fig. 1); and

said projector so that said projection lens is eccentrically disposed within said inflatable balloon (see Fig. 1); and

an external support structure (base unit 20) that supports said internal support structure (see Fig. 1), wherein

said inflatable balloon is substantially spherical (see Fig. 1).

With regard to claim 20, Fussell discloses an inflatable display comprising:

an inflatable balloon (spheroid 10) (see Col. 2, lines 46-9, Fig. 1);

a projector (leftmost projector head 42) having a projection lens (projector head lens 48) (see Fig. 1);

an internal support structure (central support mast and structure) that supports:

said inflatable balloon (see Fig. 1); and

said projector so that said projection lens is eccentrically disposed within said inflatable balloon (see Fig. 1);

an external support structure (support base 26) that supports said internal support structure (see Fig. 1);

a counterweight (base unit 20) that is deployed to counter a turning moment caused by said internal support structure and said projector (see Col. 3, lines 22-4, Fig. 1).

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

7. Claims 18 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fussell as applied to claim 1 above, and further in view of U.S. Patent No. 6,148,551 to Glass.

With regard to clam 18, Fussell is silent with respect to the inflation of the balloon of claim 1. However, Fussell teaches with respect to other embodiments of his invention the inflation of a balloon via heat generated by projectors within the balloon (see Col. 3, lines 40-2, Col. 5, lines 11-4). Glass, on the other hand, discloses an inflatable display comprising an inflator (blower 52) deployed to pump air from outside of an inflatable balloon (balloon 34) to inside said inflatable balloon (see Col. 4, lines 60-4, Figs. 1, 2). It would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate into the inflatable display of Fussell the inflator of Glass for maintaining the inflation of the balloon whether the projector is on or off.

With regard to claim 21, Fussell does not teach the inflatable display of claim 1 to further comprise a non-projected image. However, Glass discloses an inflatable display comprising a non-projected image (message 40) and wherein an inflatable balloon (balloon 34) has an outer surface (wall 36) and thereon disposed is said non-projected image (see Fig. 1). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to add to the inflatable display of Fussell the non-projected image of Glass for displaying messages.

8. Claims 23-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 4,587,633 to Fussell in view of U.S. Patent No. 5,645,248 to Campbell.

With regard to claim 23, Fussell discloses a method to control an inflatable display, the inflatable display comprising an inflatable balloon (spheroid 10) and a projector (projector head 42) disposed inside the balloon, the method comprising the steps of (see Fig. 1):

operating in a collapsing mode by:

reducing inflation of the inflatable display (see Col. 3, lines 28-30; Here it is understood that the collapse of the support columns corresponds to the deflation of the balloon.); and

collapsing an internal support structure that is mechanically connected to the inflatable display (see Col. 3, lines 28-30); and

operating in a recovery mode by:

reestablishing said internal support structure (see Col. 3, lines 28-30; It is understood that after shipment, the support columns must be erected again for use of the inflatable display.); and

increasing inflation of the inflatable display (see Col. 3, lines 40-2).

Fussell does not teach operating in a sensing mode as claimed. However, Campbell discloses a method to control an inflatable device according to wind condition, the method comprising the step of operating in a sensing mode by sensing for a preset maximum wind speed, and maintaining inflation of the inflatable display (see Col. 13, lines 3-16). Therefore, it would have been obvious to one having ordinary skill in the art

at the time the invention was made to add to the method of Fussell the step of operating in a sensing mode of Campbell for increased control of the balloon.

With regard to claim 24, Fussell is silent with respect to the performance of the collapse of said internal support structure of claim 23. However, it is well known in the art to employ linear actuators for controlling the movement of structures. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to collapse an internal support structure that is mechanically connected to an inflatable display by activating at least one linear actuator that is mechanically connected to said internal support structure for providing automatic collapsing of the internal support structure.

With regard to claim 25, Campbell teaches the method of claim 23 to further comprise, prior to said step of reestablishing, a step of sensing for a wind speed below a second preset maximum (see Col. 13, lines 3-16).

With regard to claim 26, Campbell teaches the method of claim 23 to further comprise, prior to said step of reestablishing, remotely transmitting a signal to initiate said recovery mode (see Col. 13, lines 3-16).

With regard to claim 27, Fussell teaches the method claim of 23 wherein the inflatable display is substantially spherical (see Fig. 1).

Allowable Subject Matter

9. Claims 9-16 and 22 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

10. The following is a statement of reasons for the indication of allowable subject matter:

With regard to claim 9, the prior art does not teach in combination with all other limitations recited in the claim a closed loop configured to fold as set forth in the claim.

Claims 10-16 include all limitations set forth in claim 9.

With regard to claim 22, the prior art does not teach in combination with all other limitations set forth in the claim a control system configured to control a motor in response to an output of a light sensor in order to turn a non-projected image towards a viewing direction by day and to turn said image away from a viewing direction by night as set forth in the claim.

Conclusion

11. The following prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

U.S. Patent No. 5,612,741 to Loban et al.

U.S. Patent No. 5,570,138 to Baron

U.S. Patent No. 4,802,734 to Walter

U.S. Patent No. 4,323,301 to Spector

U.S. Patent No. 2,592,444 to Matelena

U.S. Patent No. 3,586,432 to Pentes, Jr.

U.S. Patent No. 4,240,721 to Drop, Sr.

U.S. Patent No. 5,906,335 to Thompson

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michelle Nguyen whose telephone number is 703-305-2771. The examiner can normally be reached on M-F 8:30am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Russ Adams can be reached on 703-308-2847. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9318 for regular communications and 703-872-9319 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-4900.

mpn
June 17, 2003

RUSSELL ADAMS
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800